CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC 17025 :2005

T-2377

Job No.: CTCE/BBMP/WNo.12/ME/CSR 04/016a/CEMENT/2016-17 Date: 21.04.2016

TEST REPORT ON CEMENT

* CUSTOMER	:	Asst. Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
*AGENCY	:	M/s. Mahendra Engineering Works, No.243, 15th D Cross, 2nd Stage, 2nd Phase West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
*NAME OF THE WORK	:	Maintenance of UGD in Ward No.12 Shettyhalli Sub Division, BBMP, Bangalore.
*REFERENCE	:	EE/DD/WO/34/2015-16 Dated: 24.03.2016
SAMPLE ID	:	Cement
SAMPLE RECEIVED ON	:	19.04.2016
PERIOD OF TESTING	:	19.04.2016 to 21.04.2016

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4) 1988(RA-2009)	29.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5) 1988(RA-2009)	160 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5) 1988(RA-2009)	475 Minutes	Not More than 600 Minutes
3	Soundness by Le Chartlier Method	IS-4031 (Part-3) 1988(RA-2009)	1 mm	Not more than 10mm

*Information is furnished by the Customer/Representative.

Civil-Tech Consultants & Engineers Bangalore

Note:

⇒ The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 30 days from the date of testing.

****

VISHWANATH .C
Quality Manager

AE-12

21/4

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/W.No.12/ME/CSR-04/0164/SAND Gradation/2016-17 : 21.04.2016

TEST REPORT ON DETERMINATION GRADATION OF FINE AGGREGATES

* Customer	: Asst. Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	: M/s. Mahendra Engineering Works, No.243, 15th D Cross, 2nd Stage, 2nd Phase West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Work	: Maintenance of UGD in Ward No.12 Shettyhalli Sub Division, BBMP, Bangalore.
Reference	: EE/DD/WO/34/2015-16 Dated: 24.03.2016
Technical Reference	: IS : 2386 Part 1 - 1963 RA-2007
Sample ID	: Fine Aggregates
Sample Received on	: 19.04.2016
Date of Testing	: 21.04.2016

Total Wt. of Aggregates in gms 1000

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS 383-1970 (RA- 2007)			
		Zone-I	Zone-II	Zone-III	Zone-IV
10	100	100	100	100	100
4.75	95.50	90-100	90-100	90-100	95-100
2.36	75.70	60-95	75-100	85-100	95-100
1.18	52.20	30-70	55-90	75-100	90-100
600 Micron	30.20	15-34	35-59	60-79	80-100
300 Micron	14.60	5-20	8-30	12-40	15-50
150 Micron	5.10	0-10	0-10	0-10	0-15

* Information is furnished by the Customer/Representative

Remarks : This sample is under Zone-I specific limits.

CIVIL-Tech Consultants & Engineers Bangalore

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory
3. Any Query regarding the report must be reported within 30 days from the date of testing.

****

VISHWANATH .C
Quality Manager

AE-12

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ.ವೀರೇಂದ್ರನಗರ, ಬೆಂಗಳೂರು.

#23114, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/W.No.12/MP/CSR-04/016a/AGG/GR/2016-17 : 21.04.2016

TEST REPORT ON DETERMINATION GRADATION OF COARSE AGGREGATES

* Customer	: Asst. Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	: M/s. Mahendra Engineering Works, No.243, 15th D Cross, 2nd Stage, 2nd Phase West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Work	: Maintenance of UGD in Ward No.12 Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	: EE/DD/WO/34/2015-16 Dated: 24.03.2016
Technical Reference	: IS : 2386 Part 1 -1963 RA-2007
Sample ID	: Coarse Aggregates (20mm)
Sample Received on	: 19.04.2016
Date of Testing	: 21.04.2016

Total Wt. of Aggregates in gms= **5000**

Is Sieve Size in mm	Cumulative Weight Passing in %	Specific Limits as per IS :383-1970 (RA- 2007)	
		Graded	Single Sized
40	100	100	100
20	97.30	95-100	85-100
10	35.30	25-55	0-20
4.75	7.30	0-10	0-5

* Information is furnished by the Customer/Representative

Remarks : This sample is under Graded specific limits

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laborator
3. Any Query regarding the report must be reported within 30 days from the date of testing.

AE-12

****

VISHWANATH .C
Quality Manager

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory
NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job Doc: CTCE/BBMP/W.No.12/MP/CSR-04/016/Bricks/2016-17

21.04.2016

TEST REPORT ON BRICKS

* Customer	: Asst. Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	: M/s. Mahendra Engineering Works, No.243, 15th D Cross, 2nd Stage, 2nd Phase West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of the work	: Maintenance of UGD in Ward No.12 Shettyhalli Sub Division, BBMP, Bangalore.
Reference	: EE/DD/WO/34/2015-16 Dated: 24.03.2016
Sample ID/Type of Test	: Bricks / Water Absorption of Bricks
Technical Reference	: IS: 3495(Part-2)- 1992 (RA-2007)
Sample Received on	: 19.04.2016
Date of Testing	: 21.04.2016

Sl.No.	Size of Bricks in mm	Dry weight in gms	Wet weight in gms	Water Absorption in %	Average Water Absorption in %	Allowable Water absorbtion as per IS: 1077:1992 Clause 7.2)
1	220x100x75	2949	3285	11.39	11.50	Not exceeding 20%
2	220x100x75	2958	3296	11.43		
3	220x100x75	2947	3289	11.61		
4	220x100x75	2935	3287	11.99		
5	220x100x75	2967	3296	11.09		

* Information is furnished by the Customer/Representative

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

****

VISHWANATH .C
Quality Manager

AE-12

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner

CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 :2005

T-2377

Job No.: CTCE/BBMP/W.No.12/ME/CSR-04/016a/Bricks/2016-17 : 21.04.2016

TEST REPORT ON BRICKS

* Customer	: Asst. Executive Engineer, Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	: M/s. Mahendra Engineering Works, No.243, 15th D Cross, 2nd Stage, 2nd Phase West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of the work	: Maintenance of UGD in Ward No.12 Shettyhalli Sub Division, BBMP, Bangalore.
Reference	: EE/DD/WO/34/2015-16 Dated: 24.03.2016
Sample ID/Type of test	: Bricks / Compressive Strength of Bricks
Technical Reference	: IS: 3495(Part-1)- 1992 (RA-2007)
Sample Received on	: 19.04.2016
Date of Testing	: 21.04.2016

Sl.No.	Size of Bricks are in mm	Weight of Bricks in gms	Failure load in KN	Compressive Strength (N/mm^2)	Average Compressive Strength (N/mm^2)	Class Designation (As per IS: 1077:1992 Table 1)
1	220x100x75	3432.00	138.5	6.30	5.75	5.0
2	220x100x75	3418.00	127.6	5.80		
3	220x100x75	3537.00	123.2	5.60		
4	220x100x75	3458.00	114.5	5.20		
5	220x100x75	3439.00	128.6	5.85		

* Information is furnished by the Customer/Representative

Civil-Tech Consultants & Engineers Bangalore

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

****

VISHWANATH .C
Quality Manager

AE-12

#23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara, Basaveshwaranagar, Bangalore-79.
Tele Fax : 23223227, Website : www.civiltechconsultants.com
E-mail : vishwanath.ia@civiltechconsultants.com / info@civiltechconsultants.com

Scanned by CamScanner